| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/602,557 | 06/24/2003 | Thomas A. Makowski | 5150-81100 | 1251 |

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| EXAMINER |
|---|
| DAO, THUY CHAN |

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|---|---|
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<table>
<tr><td rowspan="2" colspan="2"><strong><em>Office Action Summary</em></strong></td><td><strong>Application No.</strong></td><td><strong>Applicant(s)</strong></td><td></td></tr>
<tr><td>10/602,557</td><td>MAKOWSKI ET AL.</td><td></td></tr>
</table>

| | **Application No.** | **Applicant(s)** | |
|---|---|---|---|
| ***Office Action Summary*** | 10/602,557 | MAKOWSKI ET AL. | |
| | **Examiner** | **Art Unit** | |
| | Thuy Dao | 2192 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on <u>12 December 2007</u>.

2a) ☐ This action is **FINAL**.       2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) <u>1-18 and 26-28</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-18 and 26-28</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>12 December 2007</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

1. This action is responsive to the amendment filed on December 12, 2007.

2. Claims 1-18 and 26-28 have been examined.

## Response to Arguments

3. Applicants' arguments have been considered but are moot in view of the new ground(s) of rejection.

## Drawings

4. The drawings are objected to because of minor informalities:

FIGs. 5, 12, and 14 have dark background. The examiner respectfully requests the Applicants resubmit these figures without any grey or color background (otherwise, the scanning process would make them dark or totally black); and

FIG. 8 should be vertically aligned.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

5. The use of the trademarks (e.g., JAVA.TM., PASCAL.TM...., in page 1; FORTRAN.TM., COBOL.TM. in page 14, ...) has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

6. In the amendments filed August 17, 2007, page 2, the phrase in lines 10-11 is considered to read as - -Please replace the paragraph beginning on [[p.2, line 1]] p.12, line 27, with the following replacement paragraph: - -.

Appropriate correction is required.

## Claim Rejections – 35 USC § 112, first paragraph

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-18 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**Claims 1 and 27-28:**

Independent claims 1 and 27-28 recited the limitations "...wherein each graphical program node comprises an icon and program code ... wherein the plurality of graphical

program nodes comprises: a first plurality of function nodes ..., and a second plurality of
property nodes ..." (e.g., claim 1, lines 5-6 and 9-13, emphasis added).

However, the originally filed disclosure merely discloses a first plurality of
function nodes comprising program code:

> "NODE - In the context of a graphical program, an element
> that may be included in a graphical program. A node may have an
> associated icon that represents the node in the graphical program,
> as well as underlying code or data that implements functionality of
> the node. Exemplary nodes include function nodes, terminal nodes,
> structure nodes, etc. Nodes may be connected together in a
> graphical program by connection icons or wires" (page 16, lines
> 5-9).

After further consideration, the examiner still cannot find any text/figure which
discloses property nodes comprising program code (emphasis added). This specific
limitation appears to contain subject matter which was not described in the specification
in such a way as to reasonably convey to one skilled in the relevant art that the
inventor(s), at the time the application was filed, had possession of the claimed
invention.

**Claims 2-18 and 26:**

Claims 2-18 and 26 are also rejected based on virtue of their dependencies on
the rejected base claim 1.

For the purpose of a compact prosecution, claims 1-18 and 26-28 have been
examined as currently presented as the examiner anticipates that the Applicants will
either point out the support text/figure from the originally filed disclosure or amend the
claims in the next communication with the Office.

**Claim Rejections – 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-18 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by "LabView Advanced Application Development, Part 2: Coding Techniques", published February 2002 (art made of record, hereinafter "LabView").

**Claim 1:**

LabView discloses *a computer accessible memory medium comprising program instructions, wherein the program instructions are executable by a processor to implement:*

*displaying a palette* (e.g., page 32, Application Control Palette),

*including a display window comprising a plurality of graphical program nodes for use in a graphical program* (e.g., page 32, Open Application Reference node, Open VI Reference node, ..., Call By Reference node, Property node, Invoke node included in said palette),

*wherein each graphical program node comprises an icon and program code* (e.g.,

page 32, in the palette, each node has an associated icon;

page 10, code to encapsulate data and functionality in LabView VIs/nodes;

page 32 VI Server as a node, page 47 sample recursive code, and page 48 using VI Server for recursive call;

page 53, code encapsulated into sets of Class VIs/nodes),

*wherein each graphical program node is represented by the graphical program node's respective icon in the palette* (e.g., page 32, nodes and respective icons in Application Control Palette) *and*

*is selectable from the palette for inclusion in the graphical program* (e.g., page 32, from the palette, dropping some of the VI Server nodes on a diagram)*;*

*wherein the plurality of graphical program nodes comprise a hierarchy of graphical program nodes* (e.g., page 32, using an application reference to show some available Property Node; using a VI reference to show some available Property Node, i.e., select a node of an upper level in a display hierarchy to show available nodes of a lower display level), *wherein said hierarchy comprises:*

*a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality* (e.g., page 32, function nodes as VI Server nodes, Open Application Reference node, Open VI Reference node, ...)*; and*

*a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes* (e.g., page 32 Property Nodes and page 34 Control Property Nodes),

*wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes* (e.g., page 32, property nodes in Application Control Palette and proximately displayed to function nodes, i.e., using an application reference to show some available Property Node; using a VI reference to show some available Property Node).

**Claim 2:**

The rejection of claim 1 is incorporated. LabView also discloses:

*each of the first plurality of function nodes comprises a polymorphic function node; and wherein each polymorphic function node corresponds to a respective generic functionality, wherein each function node is type-switchable between each of a plurality of function node types* (e.g., page 26)*, and*

*wherein each function node type corresponds to a respective specific functionality* (e.g., pages 9-10)*.*

**Claim 3:**

The rejection of claim 2 is incorporated. LabView also discloses *each of the first plurality of function nodes has a default function node type, and wherein the default function node type corresponds to a respective default specific functionality for the function node* (e.g., page 9, VIs and sub-VIs, wherein VIs have base program code/functionality).

**Claim 4:**

The rejection of claim 1 is incorporated. LabView also discloses:

*the first plurality of function nodes are organized in the display window in accordance with one or more of: order of use in a typical graphical program development session* (e.g., page 32)*;*

*frequency of use in a typical graphical program development session; or functional relationships among the first plurality of function nodes* (e.g., page 33-34)*.*

**Claim 5:**

The rejection of claim 1 is incorporated. LabView also discloses *the first plurality of function nodes comprises two or more of: a channel creation node; a read node; or a write node* (e.g., pages 26 and 55).

**Claim 6:**

The rejection of claim 5 is incorporated. LabView also discloses *the first plurality of function nodes further comprises: a wait until done node* (e.g., pages 13 and 16).

**Claim 7:**

The rejection of claim 5 is incorporated. LabView also discloses *the two or more of the channel creation node, the read node, and the write node comprise a primary set of function nodes* (e.g., pages 26 and 55).

**Claim 8:**

The rejection of claim 7 is incorporated. LabView also discloses *the first plurality of function nodes further comprises one or more of: a timing node; a triggering node; a start node; a stop node; or a clear node* (e.g., page 32, stop and exit nodes).

**Claim 9:**

The rejection of claim 8 is incorporated. LabView also discloses:

*the one or more of the timing node, the triggering node, the start node, the stop node, and the clear node comprise a secondary set of function nodes* (e.g., page 32); *and*

*wherein the primary set of function nodes and the secondary set of function nodes are displayed in the display window in respective groups* (e.g., pages 34-36).

**Claim 10:**

The rejection of claim 9 is incorporated. LabView also discloses *in displaying the primary set of function nodes and the secondary set of function nodes in the display window in respective groups, the primary set of function nodes is displayed in a first row in the display window and the secondary set of function nodes is displayed in a second row in the display window* (e.g., page 32, Application Control Palette).

**Claim 11:**

The rejection of claim 9 is incorporated. LabView also discloses *in displaying the primary set of function nodes and the secondary set of function nodes in the display window in respective groups, the primary set of function nodes is displayed in a first column in the display window and the secondary set of function nodes is displayed in a second column in the display window* (e.g., page 32).

**Claim 12:**

The rejection of claim 1 is incorporated. LabView also discloses *each of the second plurality of property nodes comprises a function specific property node*

*corresponding to a respective function; and wherein each function specific property node comprises one or more parameters for configuring corresponding attributes for the graphical program* (e.g., pages 10 and 22).

**Claim 13:**

The rejection of claim 12 is incorporated. LabView also discloses *the second plurality of property nodes comprises two or more of: a channel property node; a timing property node; a triggering property node; a read property node; or a write property node* (e.g., pages 26-27).

**Claim 14:**

The rejection of claim 13 is incorporated. LabView also discloses *in each property node being displayed proximate to the respective one of the at least a subset of the plurality of function nodes, each property node is displayed in one of: a common row with the respective one of the at least a subset of the plurality of function nodes; or a common column with the respective one of the at least a subset of the plurality of function nodes* (e.g., pages 57 and 61).

**Claim 15:**

The rejection of claim 1 is incorporated. LabView also discloses:

*each function node comprises a function node icon, and wherein the function node icon comprises a first image; wherein each property node comprises a property node icon* (e.g., page 5)  *and*

*wherein the function node icon comprises a second image; and wherein the second image comprises a version of the first image, indicating the correspondence between the property node and the corresponding function node* (e.g., page 28).

**Claim 16:**

The rejection of claim 1 is incorporated. LabView also discloses *displaying one or more tool icons in the display window, wherein each tool icon represents a respective*

*graphical program development tool, and wherein each tool icon is user-selectable to invoke the respective graphical program development tool* (e.g., pages 26 and 29).

**Claim 17:**

The rejection of claim 1 is incorporated. LabView also discloses *displaying one or more function palette icons in the display window, wherein each function palette icon represents a respective sub-palette of one or more additional function nodes and/or one or more additional function palettes* (e.g., page 57).

**Claim 18:**

The rejection of claim 17 is incorporated. LabView also discloses *the one or more function palette icons are user-selectable to invoke display of one or more of: a palette of function nodes related to advanced device configuration; a palette of function nodes related to advanced task configuration; or a palette of one or more additional sub-palettes comprising miscellaneous advanced function nodes* (e.g., page 32).

**Claim 26:**

The rejection of claim 1 is incorporated. LabView also discloses:

*the first plurality of function nodes comprises a generic read node and a generic write node; and wherein each property node corresponds to one of the generic read node or the generic write node* (e.g., page 26), and

*wherein the second plurality of property nodes comprises one or more read property nodes associated with the generic read node and one or more write property nodes associated with the generic write node* (e.g., page 27).

**Claim 27:**

LabView also discloses *a method, comprising:*

*displaying a palette* (e.g., page 32, Application Control Palette),

including a display window comprising a plurality of graphical program nodes for use in a graphical program (e.g., page 32, Open Application Reference node, …, Open VI Reference node, Property node, Invoke node),

wherein each graphical program node comprises an icon (e.g., page 32) and

program code (e.g., pages 10, 32/47/48, and 53),

wherein each graphical program node is represented by the graphical program node's respective icon in the palette and is selectable from the palette for inclusion in the graphical program (e.g., page 32);

wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality (e.g., pages 32 and 34); and

a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes (e.g., page 32 Property Nodes and page 34 Control Property Nodes),

wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes (e.g., pages 32-34); and

including at least one function node of the first plurality of function nodes, and at least one property node of the second plurality of property nodes in a graphical program in response to user input (e.g., pages 9, 34, and 41).

**Claim 28:**

LabView also discloses *a system for graphical programming, comprising:*

*a processor; and a memory medium coupled to the processor, wherein the memory medium stores program instructions that are executable by the processor to: display a palette, including a display window comprising a plurality of graphical program nodes for use in a graphical program* (e.g., page 32, Application Control Palette),

*wherein each graphical program node comprises an icon and program code* (e.g., pages 10, 32, 47-48, and 53),

       *wherein each graphical program node is represented by the graphical program node's respective icon in the palette and is selectable from the palette for inclusion in the graphical program* (e.g., page 32, from the palette, dropping some of the VI Server nodes on a diagram);

       *wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality* (e.g., pages 32, 46, and 48); *and*

       *a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes* (e.g., pages 32-35),

       *wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes* (e.g., page 32).

## Conclusion

11. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

       If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

       The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

       Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

       Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192